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(54) **THREE PART DENTAL BONDING  
COMPOSITIONS AND METHODS OF USE**

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(58) **Field of Classification Search** ..... 523/116,  
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See application file for complete search history.

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(57) **ABSTRACT**

Three part bonding compositions that include an etching  
solution, a preparative solution, and a curable composition, as  
well as packaged products and methods of use for the treat-  
ment of bone substrate, i.e., teeth, are described. The etch  
solutions generally include an inorganic acid, an organic acid,  
an ethylenically unsaturated functional monomer and,  
optionally a solvent, and water. The preparative solutions  
generally include an ethylenically unsaturated functional  
monomer, at least one polyethylenically unsaturated func-  
tional crosslinking monomer, a photo initiator, and at least  
one solvent. The curable composites include reactive mono-  
mers and crosslinking agents that are effective to adhere to the  
surface of the treated substrate. The methods of the invention  
provide the ability to modify a bone or bone-like surface so  
that the curable composition, such as an adhesive resin, can be  
used in combination with a restorative material.

**3 Claims, No Drawings**